

FORM PTO-1390  
(REV 10-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

01176/LH

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

09/807869

INTERNATIONAL APPLICATION NO.  
PCT/EP99/07772

INTERNATIONAL FILING DATE  
7 October 1999

PRIORITY DATE CLAIMED  
23 October 1998

TITLE OF INVENTION  
SYSTEM FOR THE DISTRIBUTION OF AUDIO AND VIDEO FILES

APPLICANT(S) FOR DO/EO/US Rob PIETERSE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)).
4. ☐ The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 16 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98; PTO-1449; 4 references.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.  
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

Express Mail Mailing Label

No.: EL 759 976 735 US

Date of Deposit: April 19, 2001

Int. Search Report; 2 sheets  
formal drawings (Figs. 1-2);  
PCT Request Form; Int'l. published  
PCT Appln; Int'l. Preliminary  
Exam. Report; Dutch priority  
document w/English translation.  
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Barbara Villani

INTERNATIONAL APPLICATION NO.

ATTORNEY'S DOCKET NUMBER

Form PTO-1390 (REV. 10-2000) page 2 of 2

Attorney Docket No. 01176/LH

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**IN THE UNITED STATES PATENT  
AND TRADEMARK OFFICE**

Date of Deposit: April 19, 2001

Applicant(s): Rob PIETERSE

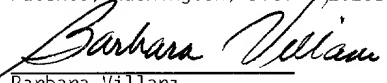
Serial No. : Based on  
PCT/EP99/07772

Filed : Herewith

For : SYSTEM FOR THE  
DISTRIBUTION OF  
AUDIO AND VIDEO  
FILES

Art Unit :  
Examiner :

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Barbara Villani

In the event that this Paper is late filed, and the necessary petition for extension of time is not filed concurrently herewith, please consider this as a Petition for the requisite extension of time, and to the extent not tendered by check attached hereto, authorization to charge the extension fee, or any other fee required in connection with this Paper, to Account No. 06-1378.

**PRELIMINARY AMENDMENT**

Hon. Commissioner of Patents  
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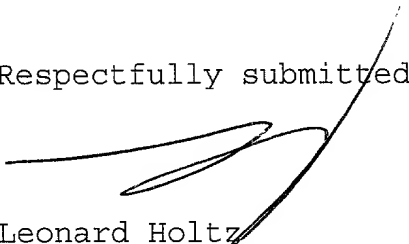
S I R :

**IN THE SPECIFICATION:**

**Page 1:** Please insert the following as the first sentence:

--This application is a U.S. National Phase Application under 35 USC 371 of International Application PCT/EP99/07772 (published in English) filed October 7, 1999.--

Respectfully submitted,

  
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LH:bv

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System for the distribution of audio and video files

BACKGROUND OF THE INVENTION

- The invention relates to a system for the distribution of audio and video files, comprising a central database with audio or video files, local processing means for processing and reproducing such files and a transmission network for the transmission of such files from the central database to the local processing means.
- 10 A comparable system is widely known, particularly in the domain of the "Internet", among others from WO9617451, in which a system is described for distributing audio "clips" via a multimedia network. The local processing means are formed by a PC, which is controlled by processing and reproducing software for audio.

SUMMARY OF THE INVENTION

- The present invention proposes a number of measures for adapting a system for distributing audio (or video) via a transmission network for application as a means of distribution for e.g. varied background music in shops, restaurants, waiting lounges etc. So far for this purpose a service is used in which, when one has a subscription to that service, cassette tapes or compact discs (CDs) are distributed from a central point via physical mail and the like to subscribing shops etc. An important point is that the music that is played in the shops etc. must be regularly changed and "refreshed". In some cases a fairly balanced collection of music is desired adapted to the time of the day, time of the year, etc. Retail chains usually also want that the music played is the same in all the various locations or branches. "Free" shops like to be free in their choice of background music.
- The invention thus comprises a system for the distribution of audio and video files, in particular - but not exclusively - for supplying music (or audio) in shops etc.,

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comprising, in a central server with a central database with audio and video files, and with local clients of the service, viz. the shops etc., local processing means for processing and playing of the files and a transmission  
5 network for the transmission of the files from the central database to the local processing means. The system according to the invention comprises a processor for selecting a collection of files from the database by means of a selection algorithm and storing that selection in a  
10 selection file, as well as for transferring via the transmission network to the local processing means of a subscriber of both the selection file and the selected files themselves, in which the local selection means can play the selected files under control of the selection  
15 file.

If the system according to the invention is applied for e.g. retail chains in which at every moment of the day the same music should be played, it is sufficient that the subscriber - the branch manager - can switch on or off the  
20 local processing system without further influence of the repertoire played by the processing system.

The repertoire is preferably refreshed periodically. Files from the local downloaded collection are then replaced by other files from a central database. Using current  
25 transmission means downloading of 1 hour of music takes around half an hour. By refreshing the local files regularly, the reproduced music keeps its attraction for visitors (for whom it is meant of course). In such a periodical refreshing mechanism the processor replaces  
30 under control of the refreshing algorithm periodically a part of the collection of local files by new files, which have to be selected again (under control of the selection algorithm) from the database and have to be transferred via the transmission means.

35 The system according to the invention can be used for the

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1 distribution of audio or video to shops etc. where - as in  
the preceding concept - they are locally not free in the  
choice of the played music or where they - contrary to the  
preceding - are locally free to make a choice from various  
5 downloaded collections. In this last option, the processor  
selects on the basis of one or more selection algorithms,  
different collections of files and stores these selections  
in different selection files, which are transferred to the  
local processing means via the transmission network. The  
10 local processing means comprise in this preferred  
embodiment of the invention a local selection device for  
selecting according to the desire of the subscriber of one  
of those different selection files. In this case the shop  
owner etc. has various collections of music available from  
15 which can be chosen.

In the last option there are locally different collections  
of files with in total (many) more files than in the option  
in which locally no choice of collections could be made.  
The "refreshing" of the collections is here a larger  
20 problem, because the time and resources required for this  
are limited. A considerable gain of time and resources can  
be obtained by having the local selection device store the  
selections made by the subscriber in a log file and have  
the central processor read out that log file via the  
25 transmission network and have under its control a part of  
the actually used collections or individual files replaced  
by new, again from the database selected files.  
The invention will below be illustrated by means of some  
figures.

30

## DESCRIPTION OF FIGURES

Figure 1 shows a first embodiment of the invention. A  
central database 1 works together or is incorporated in a  
computer 4. In the database 1, a large collection of (e.g.  
35 MPEG or JPEG coded) audio (or video) files is stored. There

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are (sub)collections of different music styles, from medieval chamber music to contemporary pop music and besides music from different parts of the world. The service which is offered by means of the system described here exists in that subscribers can make a selection from the whole range of music (the same applies of course to video) by means of a central selection algorithm, which selection, after being downloaded via the transmission network 3, can be played locally on the subscriber location. Furthermore, the invention comprises that the selected files (music pieces) are regularly replaced by other pieces, while taking into account the selection rules given by the selection algorithm. By the latter the selected musical genres remain the same, but the music pieces are replaced within these genres. On refreshing of music pieces it is made sure - by a refreshing algorithm - that there is enough coherence (genre) and variation between a replacing music piece and the musical context in which it is placed. This applies also to the selection algorithm; selection algorithm and refreshing algorithm are thus largely congruent.

The software loaded in the central computer 4 comprises a selection algorithm with which, using selection data as genre, composer, instrumentation etc, a collection of files (music files) is selected from the database. The file data (such as record numbers) of those selected files are stored in a selection file ("play list") 5. Next, the selected files and a replica of the selection file 5' are transferred via the transmission network 3 to the local computer 2 of the subscriber and stored (1', 5'). Under control of the selection file 5', the selected files 1' can then be played via an audio installation 6. In this concept the local user can only choose between playing and non-playing of the transferred music files 1', under control of file 5'. This concept is especially useful for retail

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chains etc. with a uniform corporate identity, inclusive the (background) music.

The processor, that is the computer 4 with the loaded software, replaces under control of a refreshing algorithm periodically a part of the collection of selected files and that have been transferred to the local processing means by files that are again selected from the database. As said, the correct genre is taken into account (the new files must originate from the same genre subset as the old file) as well as the variation in among others composers and performing musicians.

If it is desired - contrary to the retail chains with completely uniform presentation - that the local subscribers make a choice themselves from a series of music collections (5'), which are all compiled according to a certain logic (by means of a selection algorithm), the architecture of figure 1 is replaced by that of figure 2. In the architecture of figure 2, the processor 4 selects by means of one or more different selection algorithms different collections of files and stores these selections in various selection files ("play lists"), collectively referred to with 5". Those selection files 5" are transferred via the transmission network 3 to the local processor 2, together with the selected files. In this architecture there are consequently usually more than in the preceding embodiment. The local processing means 2 comprise a local selection device for selecting a selection file according to the desire of the subscriber from the different downloaded selection files (here refereed to with 5'''). The said local selection device preferably belongs to the software which is loaded on the local computer 2. By means of screen and mouse/keyboard a choice can be made ad libitum from one of the downloaded "play lists" 5.

Because in this option there are many more files downloaded, refreshing of it requires more capacity.

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Especially when the number of files is substantial, regularly refreshing can be a problem. However, the following measure has been taken.

The local selection device, incorporated in computer 2,  
5 stores the consecutive choices made by the subscriber in a  
"log file" 7. The central processor 4 reads periodically  
those selections stored in the log file via the  
transmission network. Under control of the uploaded log  
file 7' and a refreshing algorithm, the central processor  
10 periodically replaces a part, some files, of the collection  
files in the local processing means 2 by selecting files  
again from the central database 1. Also the selection file  
concerned from the set 5" is edited. The new files and the  
edited selection file are sent to the local computer 2. The  
15 computer 2 replaces the old files in 1' and the old "play  
list" in 5''' by new ones. By using a log file per  
subscriber the number of files to be refreshed is reduced  
considerably, namely to the local files which have been  
actually selected by the subscriber.

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## CLAIMS

1. System for the distribution of audio and video files, comprising a central database (1) with audio or video files, local processing means for processing and playing of  
5 such files and a transmission network for the transmission of such files from the central database to the local processing means, **characterised by** a processor (4) for selecting a collection of files from the database by means of a selection algorithm and storing that selection in a  
10 selection file (5), as well as for transferring, via the transmission network to the local processing means of a subscriber, replica's of both the selection file (5') and the selected files (1') themselves, the local selection means being able to play the selected files via playing  
15 means (6), under control of the selection file.
2. System according to claim 1, **characterised in that** the processor periodically replaces, under control of a refreshing algorithm, part of the collection of selected files by files which are selected once again from the  
20 database.
3. System according to claim 1, **characterised in that** the processor selects, on the basis of one or more selection algorithms, different collections of files and stores these selections in different selection files, which are  
25 transferred to the local processing means via the transmission network, the local processing means comprising a local selection device for selecting, according to the desire of the subscriber, one of those different selection files.
- 30 4. System according to claim 3, **characterised in that** the local selection device stores consecutive choices made by the subscriber, in a log file, the processor reading out the selections stored in the local selection device and periodically replacing part of the collection of selected  
35 files by files selected once again from the database.

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## ABSTRACT

System for the distribution of audio and video files. From a central database (1) audio/video files are transferred to local processing means (2). A processor (4) selects a  
5 collection of files (1') and stores these in a selection file (5'). The selection file and the selected files are transferred to the local processing means, which play the selected files. The processor periodically replaces part of the collection of local files by new files selected from  
10 the database. The processor can also select different collections of files and transfer these to the local processing means. The local processing means then comprise a local selection device for selecting selection files according to the desire of the subscriber, by means of  
15 which the files are "played" locally. For refreshing of the local files the local selection device stores the local selections and the central processor reads out those selections en replaces a part of the local collection.

20 (Fig. 2)

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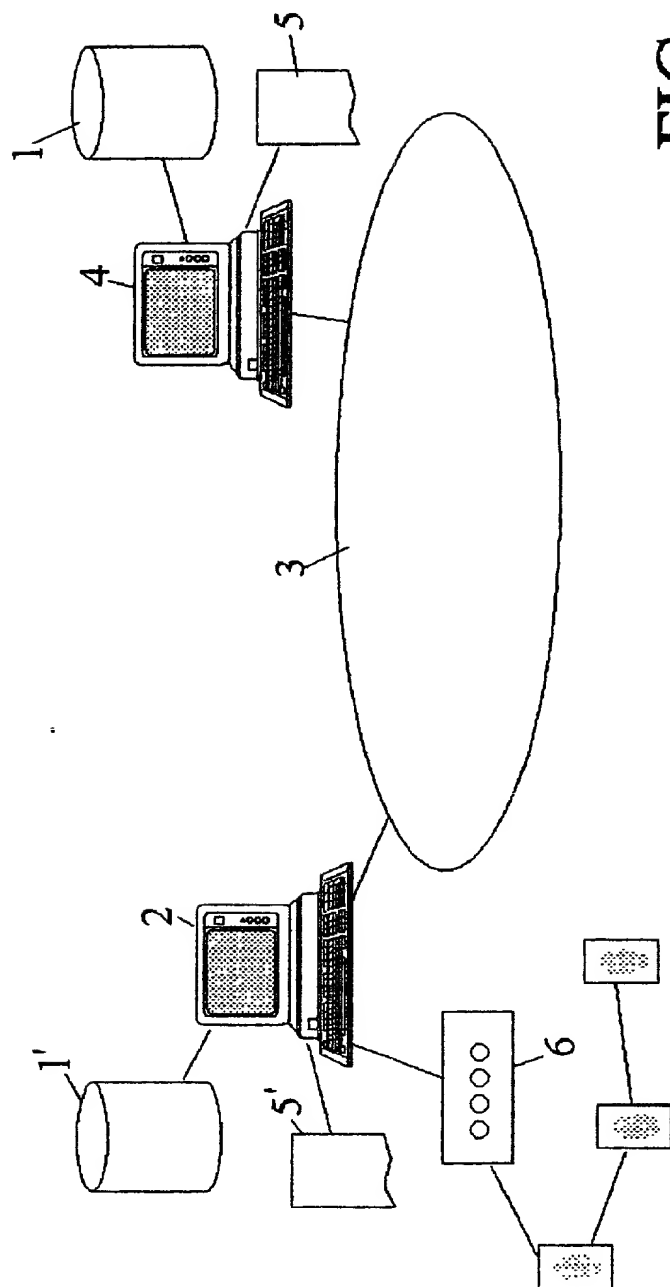


FIG. 1

FIG. 2

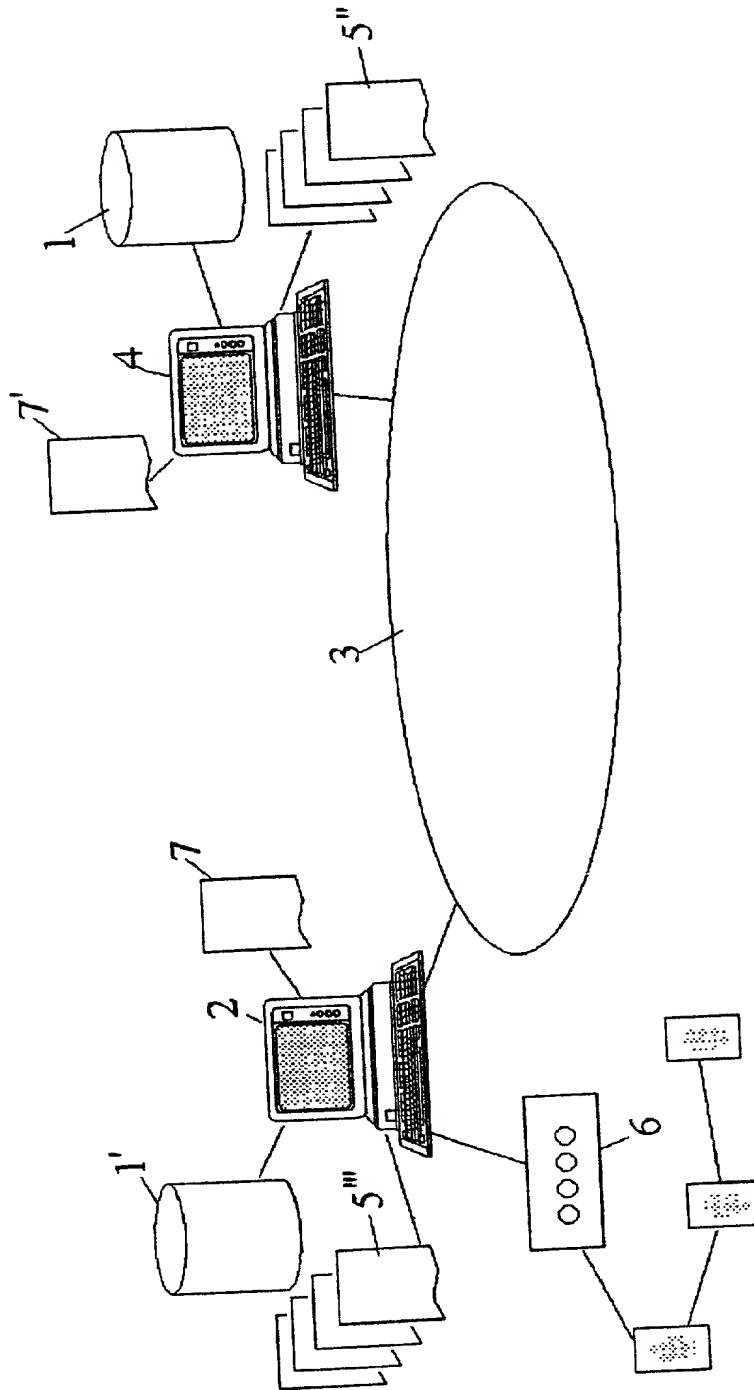


FIG. 2

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Approved for use through 10/31/2002. OMB 0651-0035

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09/807869

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First Named Inventor

R. PIETERSE

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Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).



Attorney or Agent of record.



Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number \_\_\_\_\_

Typed or Printed  
Name

Leonard Holtz, Reg. No. 22,974

Signature

Date

April 19, 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

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PCT/PTO 5920850

**APPLICATION FOR UNITED STATES LETTERS PATENT**  
PCT Declaration and Power of Attorney (35 U.S.C. 371(c)(4))  
PCT Application - United States Designated Office

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**"System for the distribution of audio and video files".**

described and claimed in International Application number PCT/EP99/07772 filed on 7 October 1999.

I have reviewed and understand the contents of said specification, including claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

I claim priority benefits under 35 USC §119 of: (i) any foreign application(s) for patent or inventor's certificate listed below; or (ii) any United States provisional application(s) listed below; and have also identified below any foreign application(s) for patent or inventor's certificate, or PCT international application having a filing date before that of the application(s) on which priority is claimed.

COUNTRY	APPLICATION NUMBER	DATE (day, month, year)	PRIORITY CLAIMED
The Netherlands	1010389	23 October 1998	Yes <u>  x  </u> no <u>      </u>
			Yes <u>      </u> no <u>      </u>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I appoint the following attorneys to prosecute this application and to transact all business in the U.S. Patent & Trademark Office connected therewith: Stephen H. Frishauf, Reg. No. 16,233; Leonard Holtz, Reg. No. 22,974; Herbert Goodman, Reg. No. 17,081; Thomas Langer, Reg. No. 27,264; Marshall J. Chick, Reg. No. 26,853; Richard S. Barth, Reg. No. 28,180; Douglas Holtz, Reg. No. 33,902; and Robert P. Michal, Reg. No. 35,614.

CORRESPONDENCE AND CALLS TO:

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**INVENTOR: SIGNATURE**

**DATE**

**RESIDENCE AND POST OFFICE ADDRESS**

Sign: 	Date: <u>12/03/01</u>	Residence: (City & Country) Verbenalaan 1 2111 ZL <u>AERDENHOUT</u> The Netherlands Post Office Address: <u>NLX</u>
Type: <u>PIETERSE, Rob</u>	Citizen of: The Netherlands	P.O. BOX 95321 2509 CH THE HAGUE The Netherlands